Claims

[1]

A picture display device displaying a picture using an analogue picture signal including a luminance signal and a chroma signal, comprising: clock generating means for generating a variable clock for changing a sampling rate of said analogue picture signal depending on a scanning rate in displaying said analogue picture signal on a display device; an A/D converter for A/D converting said analogue picture signal by sampling with said variable clock;

signal separating means for separating the A/D converted picture signal into an A/D converted luminance signal and an A/D converted chroma signal;

decoding means for decoding said A/D converted chroma signal; and signal format converting means for a signal format conversion for said display device by using said A/D converted luminance signal and the decoded color signal.

[2]

A picture display device as claimed in claim 1, wherein said clock generating means generates a constant frequency clock and comprising smoothing means for smoothing the A/D converted picture signal with said constant frequency clock.

[3]

A picture display device as claimed in claim 2, further comprising difference calculating means for obtaining difference information between said variable clock and said constant frequency clock generated by said clock generating means.

[4]

A picture display device as claimed in any one of claims 1 to 3, further comprising edge enhancement means for performing edge enhancement process to said luminance signal.

[5]

A picture display device as claimed in claim 3 or 4, wherein said signal separating means, said edge enhancement means and said decoding means perform signal separating process, edge enhancement process and decoding process by using said difference information respectively.

[6]

A picture display device as claimed in any one of claims 1 to 5, further comprising screen size recognition means for recognizing a screen size of said analogue picture signal from said analogue picture signal.

[7]

A picture display device as claimed in any one of claims 1 to 6, wherein non-linear display in the horizontal direction is performed by changing a sampling rate of said analogue picture signal depending on a scanning rate in displaying said analogue picture signal on a display device.

WO 2005/018228 PCT/IB2004/051457

12

[8]

A picture display device as claimed in any one of claims 1 to 7, wherein said display device is device selected from a group of a liquid crystal display device, a plasma display device and an electro-luminescence display device.